

Having described the invention, the following is claimed:

1. An apparatus comprising a low-carbon steel tube, said low-carbon steel tube yielding plastically more than about 5% before fracturing at temperatures down to about -40°C when stress sufficient to cause said low carbon steel tube to so yield is applied to said low-carbon steel tube.

2. The apparatus of claim 1 wherein said low-carbon steel tube is formed from a low-carbon steel consists essentially of, by weight, about 0.07% to about 0.12% carbon, about 0.70% to about 1.60% manganese, up to about 0.020% phosphorous, up to about 0.015% sulfur, about 0.06% to about 0.35% silicon, about 0.25% to about 1.20% chromium, up to about 0.65% nickel, about 0.20% to about 0.70% molybdenum, up to about 0.35% copper, about 0.02% to about 0.06% aluminum, up to about 0.05% vanadium, up to about 0.25% residual elements, and the balance iron.

3. The apparatus of claim 1, wherein said low-carbon steel tube has a tensile strength of at least about 130,000 psi, a yield strength of at least about 104,000 psi, and an elongation at break of at least about 14%.

4. The apparatus of claim 1, wherein said low-carbon steel tube is formed from a low-carbon steel that consists essentially of, by weight, about 0.07% to about 0.12% carbon, about 0.70% to about 1.60% manganese, up to about 0.020% phosphorous, up to about 0.015% sulfur, about 0.06% to about 0.35% silicon, about 0.25% to about 1.20% chromium, up to about 0.65% nickel, about 0.20% to about 0.70% molybdenum, up to about 0.35% copper, about 0.02% to about 0.06% aluminum, up to about 0.05% vanadium, up to about 0.19% residual elements, and the balance iron and has a tensile strength of at least about 130,000 psi, a yield strength of at least about 104,000 psi, and an elongation at break of at least about 14%.

5. A method comprising the steps of:

casting a billet of low-carbon steel, said billet of low-carbon steel having a first diameter and consists essentially of, by weight, about 0.07% to about 0.12% carbon, about 0.70% to about 1.60% manganese, up to about 0.020% phosphorous, up to about 0.015% sulfur, about 0.06% to about 0.35% silicon, about 0.25% to about 1.20% chromium, up to about 0.65% nickel, about 0.20% to about 0.70% molybdenum, up to about 0.35% copper, about 0.02% to

about 0.06% aluminum, up to about 0.05% vanadium, up to about 0.25% residual elements, and the balance iron;

reducing the diameter of said billet of low-carbon steel by hot-rolling said billet,

forming a tube having an annular wall by piercing said billet;

reducing the thickness of said annular wall to a first thickness by cold drawing said tube,

heat treating said tube after said cold drawing to form a low-carbon steel tube that yields plastically more than about 5% before fracturing at temperatures down to about -40°C when stress sufficient to cause said low carbon steel tube to so yield is applied to said low-carbon steel tube.

6. The method of claim 5, wherein the step of heat treating comprises heating said tube to a temperature of at least about 900°C, cooling said tube to room temperature, and tempering said tube to a temperature of at least about 500°C.

7. The method of claim 6, wherein the step of heat treating comprises induction heating said tube to a

temperature of about 900°C and cooling said tube to room temperature.